Disk 0 2/14/01

9

V/R YNC

Bowie STS3 Broadband Sonar Operator 2/11/01

Summary of interview of STS3 Bowie on 2/11/01

Sonar Operator - Broadband.

Qualified Sonar 1 year. Did not make last westpac boat made.

Before preparations for P/D 3 contacts to the north. Ship was heading northerly. 2 contact to left of bow, one contact right of bow all drawing slow left bearing rates S12, S13, S14. Not long on northerly leg we had just finished angles. Does not remember classification. Had held S12-S13 for approximately one hour or less.

Unsure of Blade rate, configuration had been determined by class. ~~12 and 13 looked like merchants.~~ - NEVER SAID no determination made as to classification

S-14 gained shortly after S-13 (thinks), unsure of classification.

Work Load Share Operator (SN Rhodes) was unqualified (under instruction of STS1 Reyes.) - Reyes was not officially on watch as over instruction watch stander

Baffle clear maneuver almost to south, (Approximately > 120°s.) Put all 3 contacts out side port baffles. NO other contacts.

Observed the 3 contacts very slight bearing rate. XO was in ① SONAR - ~~control~~. First leg on northerly course for not very long before turning right to south. 5 to seven minutes on second leg. Does not remember any significant change in bearing rate.

Went to P/D on that course, clear course did acoustic search +40° to left and of bow. Did not hear any other contacts. Did not see any change in bearing rate on 3 we held.

At P/D ~~over~~heard no close contacts. Sonar and ESM reported "no close contacts" shortly after, CO ordered emergency deep. Then course change diving, don't remember to right or left.

At 400 feet did emergency blow, sonar screens ~~blanked~~ cleared because of air noise. Continued to listen but all you here is air then flow noise.

NO fish finders or fathometers.

Then collision.

55

1 2

② ~~X.O. was in sonar~~ during baffle clear maneuver

Regained all three contacts. For sure he regained 12, 13, ~~may~~ have regained S-14 as well, or another #. Based on bearings and bearing rates. Unsure if we went back to class.

When asked, STS3 could not explain the near 60° bearing change logged for S-13. He was not keeping logs.

During high speed maneuvers two contacts had increasing SNR. Indicated to him that they were (moving quick) MAY HAVE BEEN ~~AUTOMATICALLY~~ The ~~Trip Wire~~ was called in to control. INCREASE IN SNR

~~Sonar contact on the EV~~ ~~was~~ air noises and transients. HEARD ~~Taken~~ AS VESSEL WAS SINKING

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1 March 2001

MEMORANDUM

From: STSCM(SS) M. A. Anderson, NAVSUBTRACENPAC ACINT Division
To: LCDR Timothy Stone, JAG Corps

Via: Executive Officer, Naval Submarine Training Center Pacific

Subj: USS GREENEVILLE (SSN 772) SONAR WATCHSTANDER STATEMENTS

Encl: (1) Interview Statement ICO STS1(SS) McGiboney
(2) Interview Statement ICO STS1(SS) Reyes
(3) Interview Statement ICO STS3(SS) Bowie
(4) Interview Statement ICO STSSN(SU) Rhodes
(5) Interview Statement ICO STSC(SS) Gross

1. On 27 February 2001, I conducted individual interviews of Sonar watchstanders from USS GREENEVILLE (SSN 772), as directed by Executive Officer, Naval Submarine Training Center Pacific. The purpose of the interviews was to obtain statements on Sonar conditions and indications leading up to GREENEVILLE's collision with MV EHIME MARU on 9 February 2001.

2. The following areas were addressed in the interviews:

a. Personnel - Watchbill assignments, qualifications and supervision of watchstanders, and watchstander training.

b. Equipment - Sonar search plan, degraded (out of commission) equipment and impact on operations, lineup.

c. Procedures - General search, baffle clearing, periscope depth procedures, target signal recognition, tactical tripwires.

d. Equipment display indications - Contact being tracked in automatic target following (ATF), target signature appearing on classification displays, background noise and interfering contacts, bearing rate, propagation path (number of depression/elevation (D/E's) held), target signal to noise ratio (SNR), opening/closing interference pattern observed/not observed, near-field effect observed.

e. Communications - Contact reports and acknowledgements to/from Control, formality of communications.

3. The statements submitted as enclosures (1) through (4) are verbatim as related to me by each watchstander. My personal comments or assessments are indicated as such.

4. My goal was to establish what indications of a potentially dangerous situation were, or were not, present in Sonar, as well as actions taken by the personnel present in Sonar with regard to ship's safety. Enclosure (5) is included as an assessment of Sonar watchstander training and supervision.

Very respectfully,

M. A. ANDERSON, STSCM(SS), USN

56 9

Interview with STS1(SS) McGiboney (Sonar Supervisor)
0910-1130

Onboard USS Greenville (SSN 772) ~ [(B)(6)] J.
Qualifications:

Personnel

Watchsection Makeup - Stated he had stood watch with [ ] before and that he had supervised [(B)(6)] for 2 underways since SRA. Fourth watchstander [ ] was assigned Bottom Sounder Operator in Control.

Stated he pulled STS1(SS) Reyes into Sonar to oversee Rhodes, who was standing Workload Share SAPBB (WLS (SAPBB). "To add another set of eyes"

Watchsection Qualifications -

STS1(SS) Reyes: [(B)(6)] J.
Prerequisite quals
STS3(SS) Bowie: Onboard ~ [(B)(6)] J
STSSN(SU) Rhodes: Second time underway,

Manning & Supervision (COMMENT: AN/BSY-1 Op Guidelines requires Supervisor and 2 qualified watchstanders in Sonar for Transit/ISE operations. STS3(SS) Anderson, standing watch in Control, is qualified Advanced and Auxiliary Operator, so technically the watchsection had two qualified watchstanders. Supervision was adequate for the tactical situation, especially when augmented with STS1(SS) Reyes.)

Training - Stated had been conducted on Sonar Logs within past 6 months.

On-coming Watch Turnover - Stated normal watch turnover, 3 contacts (all classified surface contacts), indicated AVSDU was OOC, noted as such on Maneuvering Watch.

Logkeeping - Stated he knew logs were deficient. Logs contained no screw/blade or turncount information for S-13, although he did not recollect any information available on DEMON display.

Equipment -

AN/BQR-22A (EC-17) - Stated Control Room remote monitor was OOC and had been removed for replacement with a flat panel, and that the equipment remained tagged out because the techs were unsure if it was safe to have powered up with the monitor out. (COMMENT: Having the AN/BQR-22A (EC-17) available would have provided classification functions and would have allowed the WLS stack to be set up for full SAPBB. However, this would have required an additional watchstander, and I feel the Sonar Supervisor would have been unlikely to man the equipment based on the low contact density.)

AVSDU - (COMMENT: The AVSDU being OOC is a significant equipment issue.

The lack of a sonar repeater in Control meant the CO and OOD were basically driving blind, with only the fire control system and plots to drive by. The XO stated he came into Sonar to get the picture as the ship was clearing baffles and making preps to go to P/D)

Equipment Lineup - Unit 1103: SAPBB, 8 D/E, STA/ITA/LTA Unit 1104: WLSPBB, Search Class alternating DEMON and LOFAR on one CRT, and 4 D/E format on the other CRT. (COMMENT: This is a satisfactory lineup for the tactical situation.)

Target Tracking Procedures and Observations -
- Stated Sonar held S-13 ~ 30-45 minutes prior to large angles & rolls.
- Stated S-13 was in ATF the entire time (COMMENT: S-13 appeared to be in and out of ATF during large angles & rolls.)
- Stated S-13 classified as a surface contact, no turncount or screw/blade noted. (COMMENT: Classification as a surface contact is adequate, since no propulsion data was detected to further classify.)
- Stated that he did not observe an interference pattern from S-13.
- Stated there were no other contacts interfering with S-13 track, although he did not know what LE was.
- Stated that S-13 was held in upper 3 D/E angles only. (COMMENT: As a general rule of thumb, the more D/E's a contact is held in, the more concern there should be for a closer contact. An 8 D/E contact would be cause for immediate concern.)
- Stated that S-13 was a low SNR contact (COMMENT: In general, S-LOGGER data showed S-13 SNR to be variable, never getting above +10 to +13 immediately prior to collision. This was probably caused by large angles & rolls, as well as high ownship speed. I feel the varying SNR was notable, but not an indication of impending dangerous situation.)
- Stated that S-13 was a low bearing rate contact. (COMMENT: S-LOGGER data indicated S-13 bearing rate was low prior to and during the baffle clearing leg. The low bearing rate should have been a tripwire for a contact pointing ownship (which was the case), but contact may have been considered distant with low bearing rate, due to the low SNR, limited number of D/E angles and lack of propulsion data or interference pattern.) Bearing rate increased to 5.5 degrees/minute, on the left drawing left, 2 minutes/53 seconds prior to collision. There was not adequate time to see bearing rate develop to the point to cause undue concern.)
- Stated that of the 4 contacts held in the period before the collision (S-10, S-12, S-13, S-14), both S-10 and S-14 had higher bearing rates and that his attention was focused on them.
- Stated that no near-field effect was noted from S-13, even immediately prior to collision. (COMMENT: Possibly due to low contact SNR and narrow aspect.)

Baffle Clearing Procedures -
- Stated that ownship maneuvered from 340 to 120 for a baffle clear immediately following large angles & rolls. Recalled ship was steady on baffle clearing leg for ~ 3 minutes (COMMENT: S-LOGGER indicates steady for 4.5 minutes, sufficient to obtain a TMA leg on S-13.)
- Stated that he reported previously baffled area clear following the maneuver.

Periscope Depth Procedures -
- Stated normal procedures used for proceeding to P/D (silence in sonar, shifted to STA/ITA, operators searching 40 degrees either side of bow)
- Stated nothing abnormal or out of the ordinary with contact situation, bearing rate, or SNR while proceeding to P/D.
- Stated he heard "No close contacts" over open-mike when at P/D, followed by "Hold no visual contacts".
- Stated that S-13 SNR, D/E's, and bearing rate were the same at P/D as at 400 ft.

Emergency Deep and Communication Procedures -
- Stated that standard Sonar reports were made to Control, and acknowledged.
- Stated that XO was in Sonar for reason not communicated to Sonar Supervisor, although he did not find that unusual.
- Stated that XO was not a distraction and did not interfere with conduct of the Sonar watch.
- Stated that he did not note a report that the Emergency Deep from P/D was a drill for training, although it was not unusual for the CO to order such.
- Stated that cavitation during the Emergency Deep had a minimal effect on tracking ability.

Summary - (COMMENT: With the exceptions of the watchbill manning issue, STS1(SS) McGiboney's comments make it apparent that his watchsection was conducting operations in accordance with published guidance. All indications available to the Sonar watchstanders and Sonar Supervisor listed above give the impression of a distant contact rather than an impending extremis situation.)

Interview with STS1(SS) Reyes (Sonar assistant)
1135-1300

Onboard USS Greenville (SSN 772) [(B)(6)]
Qualifications: [ ]
Prerequisite qualifications [(B)(6)]
[ ] (B)(6)

Personnel -

- Stated that he had come to Sonar to retrieve his jacket and was asked to remain in Sonar during the P/D ascent to monitor STSSN(SU) Rhodes, who was manning the WLSPBB stack.
- STS1(SS) Reyes wanted to clarify with me his statement to NTSB regarding STSSN(SU) Rhodes Sonar qualifications. The NTSB statement indicated he said "...STSSN(SU) Rhodes was qualified Auxiliary Operator.", when in fact he told the NTSB investigator that STSSN(SU) Rhodes was <u>not</u> qualified a Sonar watchstation.

- Stated the XO was in Sonar for the baffle clear and P/D ascent.

- Stated that civilian visitors were in Sonar prior to the ship performing large angles a & rolls.

Equipment -

- Stated that he did not know whether a Sonar Search Plan had been run for this underway.
- Stated that the Control Room AN/BQR-17A (EC-17) monitor was OOC and that Sonar had been directed to remove it from the ship in preparation for replacement with a flat panel monitor.
- Stated that the AVSDU was noted OOC during the Maneuvering Watch. Display faults (compressed display) indicated a probable bad deflection amp, which he stated was an "easy fix" and would require about 1 hour to replace. Repair of the AVSDU was deferred until after the underway by the Control Room Supervisor (Navigator).

Equipment Operation and Indications -

- Stated that WLSPBB was being employed with Search Class assigned to one CRT and 4 D/E format assigned to the other CRT.
- Stated that he noted 3 contacts being tracked (S-10, S-12 and S-13), and of these 3, only S-10 showed a weak closing interference pattern.
- Stated that none of the contacts showed screw/blade or turncount information.
- Stated that S-12 and S-13 were 2 D/E contacts, on the left with a low or slight left bearing rate.
- Stated that both contacts had low SNR.
- Stated that at no time did he observe near-field effect (COMMENT: STS1(SS) Reyes left Sonar just prior to the collision. Near-field effect would not have been apparent during his time in Sonar)
- Stated that the work tape recorder was being used to play biologics for the civilian visitors and that the recorder had inadvertently not been returned to the record mode after the visitors departed Sonar.

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- Stated that he did not know what measured LE was at the time.

Procedures -

- Stated that the ship performed a satisfactory baffle clear.
- Stated that he directed STSSN(SU) Rhodes to concentrate search off the bow during the P/D ascent. (COMMENT: This is a required watchstanding procedure.)
- Stated that he noticed the aft door to Sonar opened a couple times during the P/D ascent. He did not note who was opening the door. (COMMENT: During a normal P/D ascent, there is silence in Sonar and personnel are restricted from entering or leaving Sonar.)
- Stated that, not having been present in Sonar for all maneuvers, he was unsure whether they were adequate for TMA or not.

Communications -

- Stated that he heard reports that the ship was proceeding to P/D, and no close contacts after arriving at P/D.
- Stated that to the best of his recollection, all reports were complete, received and acknowledged.

Interview with STS3(SS) Bowie (SAPBB Sonar Operator)
1320~1400

Onboard USS Greenville (SSN 772) ~C (B)(6)
Qualifications: (

Personnel -

- Stated that the CO passed through Sonar after large angles & rolls, prior to P/D.

Equipment Operation & Indications -

- Stated that he was operating SAPBB with no display enhancements (data requantization, spoke suppress) in effect. (COMMENT: No display enhancements were necessary, based on tactical picture and contact density).
- Stated that all SAPBB DIMUS traces were clear and easy to track, with exception that tracking was marginal during large angles & rolls.
- Stated that there were no interfering contacts near S-13 bearing.
- Stated that 2 contacts held during the baffle clear (S-12 and S-13) were on left, with low or slight left bearing rate.
- Stated that S-13 was a 3 D/E contact.

Procedures -

- Stated that he was not distracted during the watch.
- Stated that the baffle clear was "unusual", in that the 140 degree course change was different from that normally conducted. He was used to the ship conducting more than one course change during a baffle clear.
- Stated that conditions during the P/D ascent were quiet and normal.

Communications -

- Stated that he heard "No close contacts" over the open-mike after arriving at P/D.
- Stated that he heard a course change ordered after the Emergency Deep order was passed.

Interview with STSSN(SU) Rhodes (Under-instruction WLSPBB Sonar Operator)
1500

Onboard USS Greenville (SSN 772) [(B)(6)]
Qualifications:

Personnel -

- Stated that he had stood port-and-starboard Sonar Operator (under instruction) under all 3 Sonar Supervisors.
- Stated that STS1(SS) McGiboney is a "...good Sonar Supervisor. Does lots of on-watch training."
- Stated that STS1(SS) Reyes was in Sonar during the baffle clear and P/D ascent.
- Stated that LTjg Coen (Officer of the Deck) "liked to check everything" with Sonar, was thorough.

Equipment Operation and Indications -

- Stated that he understands baffle clearing and P/D procedures, contact screw/blade and turncount determination, basic interference patterns and basic bearing rate concepts.
- Stated that he detected no screw/blade, turncount or interference pattern from S-12 or S-13.
- Stated that he noted S-13 as "constantly on", as opposed to starting up and shutting down.
- Stated that S-13 was appearing in the upper D/E angles.
- Stated that S-13 had a low bearing rate.

Procedures -

- Stated that the baffle clear was "quick" compared to those on previous underway.
- Stated that P/D ascent was "smooth", uneventful.
- Stated that he would "ask for a double check on LOFAR and DEMON analysis" by a qualified watchstander.
- Stated that he has had basic logkeeping training.

Interview with STSC(SS) Gross (Sonar LCPO)
1600

Onboard USS Greenville (SSN 772) < [(B)(6)]
Was not onboard during the incident.

Personnel -

- Stated that since reporting, he noted numerous deficiencies with Sonar training that he was in the process of correcting.
- Stated that he and one third of the Sonar Division were off the ship that day and were using the time conducting training on Sonar TMA and applying the training in the NSTCP Attack Center that afternoon.

Sonar LCPO Qualitative Evaluation of Sonar Watchstander Abilities -

STS1(SS) McGiboney - Positive: Outstanding technician, works hard, trains watchstanders. Negative: Slow at administrative tasks.

STS1(SS) Reyes - Positive: Enthusiastic, solid technician, good operational experience on USS San Juan, personnel motivator. Negative: Somewhat outspoken, "needs to polish his tact".

STS3(SS) Bowie - Positive: "Should be an STS2", would CAP if possible. Above average operator, excellent technician. Negative: Documentation and administrative abilities are average.

STSSN(SU) Rhodes - Positive: "Always willing to learn". Enthusiastic. Negative: Lack of self-confidence, tends to over-study on qualifications.

OFFICER ASSIGNMENTS

EXHIBIT 57 PAGE 1 OF 1

UNDERWAY

TACTICAL TRAINING OFF SHIP

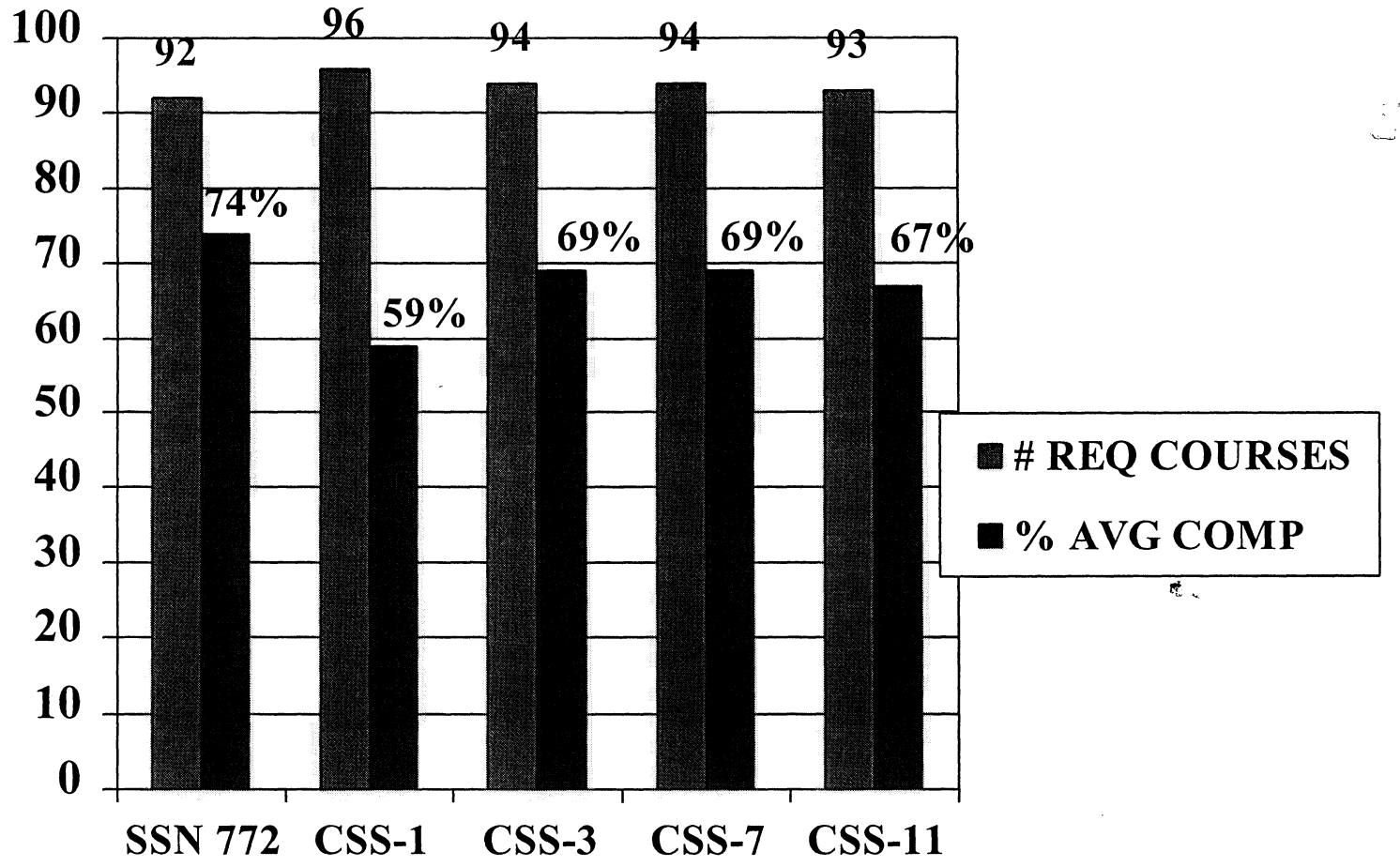
	UNDERWAY			TACTICAL TRAINING OFF SHIP	
	CDR [redacted]	LCDR [redacted]		LT [redacted]	LT [redacted]
OOD	LTJG [redacted]	LT [redacted]	LTJG [redacted]	LTJG [redacted]	LTJG
EOOW	LT [redacted]	LTJG		LTJG	ENS
TOUR GUIDE	LCDR [redacted]	LT [redacted]			
SUPPLY OFF.	ENS [redacted]				

(b)(3) (BX6)

Gold Dolphins

Silver Dolphins

COMSUBPAC SSN FORMAL SCHOOLS COMPLETION



* DATA SOURCE: SUBMARINE TRAINING MASTER PLANNING SYSTEM

SONAR ASSIGNMENTS

UNDERWAY

Sonar Sup	STS1	STS1
Sonar Op	STS3	STS1
Sonar Op	STS3	STS3
Sonar Op	STS3	
	STSSN	

TACTICAL TRAINING OFF SHIP

	STSC	
	STS2	STS3
	STS2	STS3
	STS3	STSSN

(b)(3) (b)(6)

Silver Dolphins